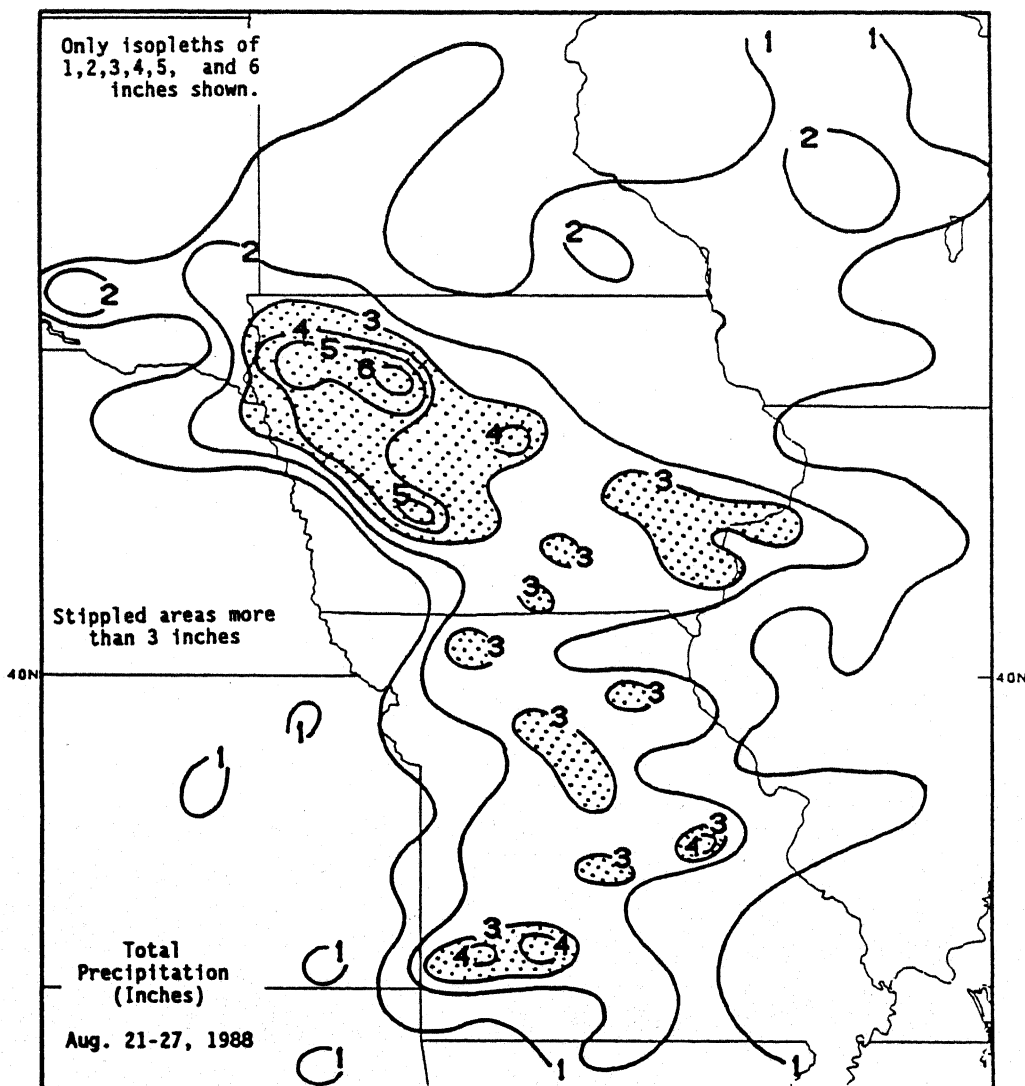


# WEEKLY CLIMATE BULLETIN

No. 88/35

Washington, DC

August 27, 1988



PORTIONS OF THE CENTRAL UNITED STATES, ESPECIALLY IOWA AND MISSOURI, RECEIVED SIGNIFICANT RAINFALL LAST WEEK AS NEAR TO ABOVE NORMAL PRECIPITATION OVER THE PAST FEW WEEKS HAS GREATLY REDUCED SHORT-TERM DRYNESS IN MOST OF THE MIDWEST; HOWEVER, LONG-TERM DEFICITS OF 6-12 INCHES SINCE APRIL 1 STILL AFFLICT THE AREA.



# GLOBAL CLIMATE HIGHLIGHTS

## MAJOR CLIMATIC EVENTS AND ANOMALIES AS OF AUGUST 29, 1992

### Western United States:

#### **COOLER CONDITIONS AID FIRE SUPPRESSION.**

Return to near normal temperatures assisted firefighters who have been fighting numerous large wildfires for several weeks. Pockets of above normal temperatures remained in the desert Southwest [Ending at 33 s].

### Central and Eastern North America:

#### **COLD AIR OVERSPREADS THE REGION.**

Heavy snow blanketed parts of Montana and the Canadian Prairie Provinces as temperatures averaged as much as 8°C below normal. Farther south and east, unusually chilly weather was widespread, with the Dakotas and Nebraska reporting weekly temperature departures near -6°C. Highs dropped below freezing through much of the northern and central Rockies, and wind chills reached as low as -12°C in northern Montana [9 weeks].

### Southeastern United States:

#### **HURRICANE ANDREW BRINGS HEAVY RAINS AND HIGH WINDS.**

Hurricane Andrew lashed parts of Florida and Louisiana with intense cloudbursts and gusting winds. Hurricane Andrew weakened. Its remnants combined with a slow-moving cold front to bring heavy rains (up to 250 mm) to other parts of the Southeast and mid-Atlantic (see front cover). Some locations recorded six-week moisture surpluses of 75 to 275 mm [8 weeks].

### Central South America:

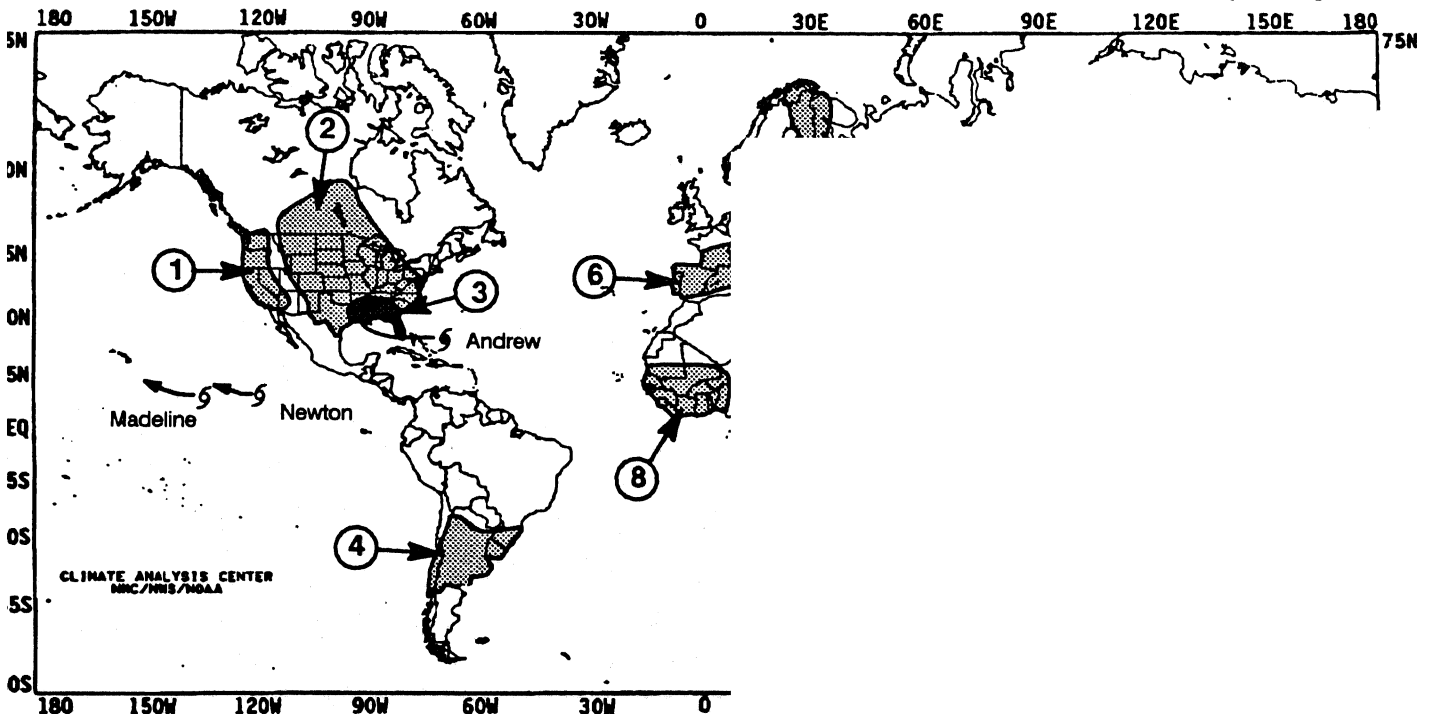
#### **MORE HOT WEATHER.**

Temperatures averaged as much as 7°C above normal and highs soared to 30°C in northern Argentina. Temperatures rose above 30°C as far south as 30°S [9 weeks].

### Northern Scandinavia:

#### **WETNESS PERSISTS.**

Precipitation totaled 25 to 125 mm as surpluses since mid-July approached 100 mm in some areas [8 weeks].



#### **EXPLANATION**

TEXT: Approximate duration of anomalies is in brackets. Precipitation anomalies are in brackets.  
MAP: Approximate locations of major anomalies and episodic events. Shaded areas indicate temperature anomalies, four week precipitation anomalies, long-term moisture anomalies.

### Central and Eastern Europe:

#### **HOT AND DRY WEATHER CONTINUES.**

Temperatures averaged 6°C to 8°C above normal in much of central and southern Europe. Highs soared to 39°C in the Ukraine and 38°C in Czechoslovakia and Austria [6 weeks]. Much of northern and central Poland, northern and western Germany, Switzerland, northern Italy, the Baltic states, and the Benelux countries reported 20 to 50 mm of rain, but little or no rain fell elsewhere as six-week moisture deficits ranged from 50 to 240 mm across most of the region [21 weeks].

### Turkey and Southwestern Asia:

#### **COLD SNAP ENDS.**

Temperatures averaged as much as 4°C above normal in most areas, although weekly departures reached -6°C in parts of Kazakhstan [Ended at 22 weeks].

### Western Sahel:

#### **MOISTURE DEFICITS ACCUMULATE.**

For the sixth consecutive week, most locations in the western Sahel recorded less than 20 mm of rain north of 15°N and south of 7°N, with 20 to 50 mm (and scattered higher totals) falling elsewhere. Although precipitation is typically spotty, most locations have observed generally below normal totals since mid-July. Six-week moisture deficits ranged from 50 to 300 mm in Mali, Guinea, and other scattered locations in the region [6 weeks].

### Southeastern China:

#### **DRYNESS CONTINUES.**

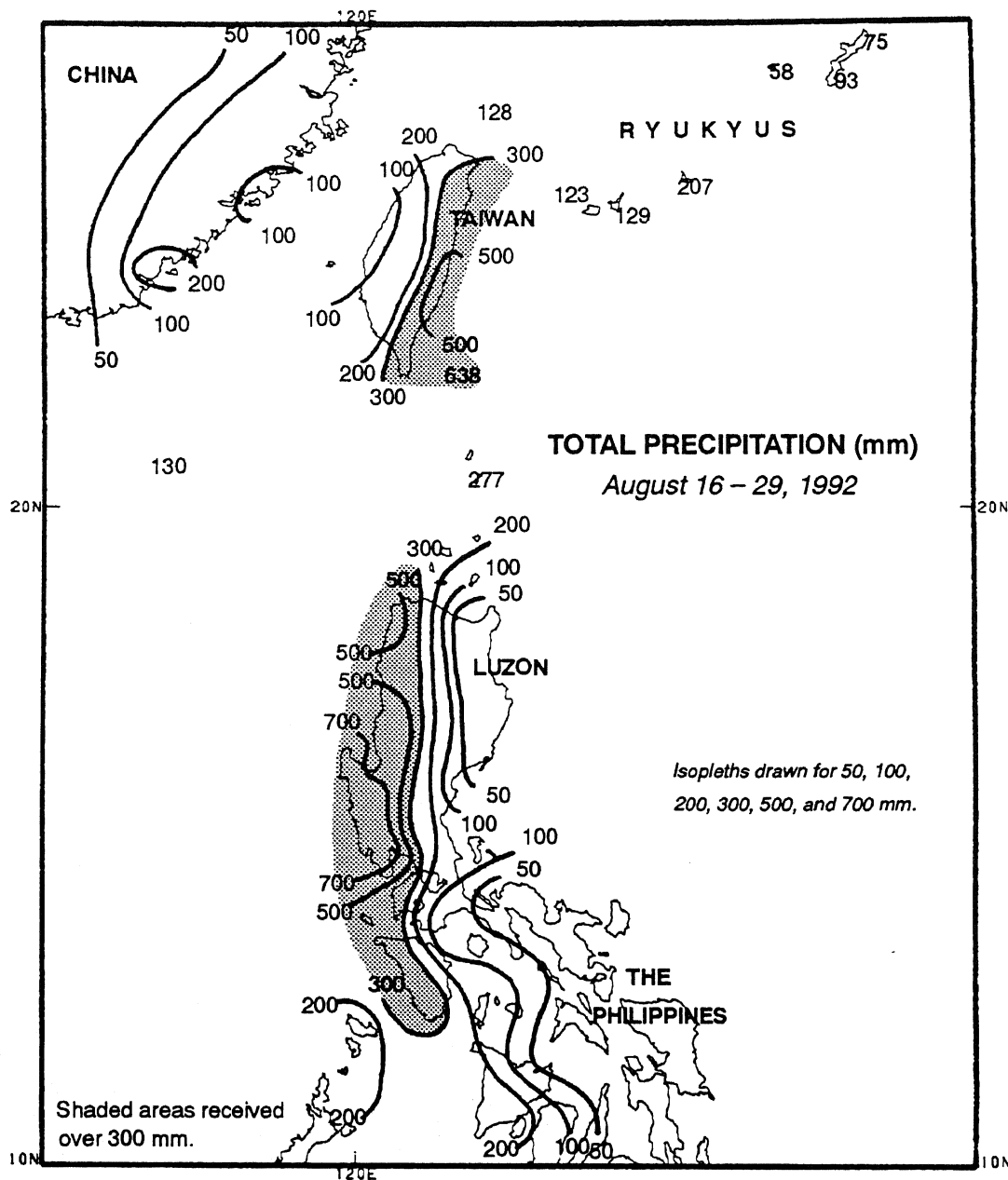
Precipitation amounts were generally below 30 mm, except along the immediate southern and southeastern coastlines. During the last six weeks, totals in southern China were 50 to 450 mm below normal amounts [8 weeks].

### New Zealand:

#### **COLD AND WET WEATHER PREVAILS.**

According to press reports, the worst snow storm in twenty years caused the loss of over one million head of livestock in southern New Zealand. Temperatures averaged as much as 3°C below normal last week while precipitation totals ranged from 25 to 125 mm [2 weeks].

## GLOBAL CLIMATE HIGHLIGHTS FEATURE



**INTENSE RAINFALL, PARTIALLY FUELED BY TROPICAL CYCLONES, DELUGES EASTERN TAIWAN, THE NORTHWESTERN PHILIPPINES, AND GUAM.** *In eastern Taiwan, Tropical Storm Polly brought heavy rains and gusty winds to the island on Saturday, leaving several individuals dead, making numerous roads impassible, and forcing the suspension of domestic air traffic, according to press reports. During the last two weeks, 300 to 638 mm of rain drenched the eastern side of Taiwan. Farther south, the fringes of Tropical Storm Polly generated the latest in a series of heavy rainfall events in the central and western Philippines. Heavy flows of mud and lahar (a mixture of water and smoldering volcanic debris), particularly near Mt. Pinatubo, forced over 270,000 individuals from their homes and buried roads under as much as 10 feet of lahar, according to press reports. The Philippine President recently approved monetary aid for the region which has received as much as 850 mm of rain since mid-August. To the east, Typhoon Omar, packing winds of up to 150 mph, became the most devastating typhoon to hit Guam since 1976. At least 180 individuals were injured, over \$300 million in damage was estimated, and running water and power were cut off for the entire island by the storm, according to press reports.*

# UNITED STATES WEEKLY CLIMATE HIGHLIGHTS

*FOR THE WEEK OF AUGUST 23-29, 1992*

Hurricane Andrew, which formed early in the previous week in the central Atlantic Ocean, strengthened as it moved westward, smashing through the Bahamas on Sunday and across southern Florida early Monday with winds of up to 150 mph (see front cover Weekly Climate Bulletin No. 34, dated August 22, 1992). After entering the Gulf of Mexico, Andrew veered to the northwest and slammed into the Louisiana coast early Wednesday, packing winds of up to 150 mph (see front cover). Andrew's eye came ashore west of Morgan City, LA, bringing widespread flooding to the coast and spawning numerous tornadoes. Andrew weakened as it moved inland into Mississippi and lost its tropical characteristics in northeastern Mississippi on Thursday. The remnants continued northeastward, leading heavy rains, moderate breezes, and scattered breaks of severe weather across the southern and central Appalachians and mid-Atlantic before the low-level circulation finally disappeared in central Pennsylvania late Friday. Elsewhere, the remnants of Pacific Hurricane Lester led strong thunderstorms and heavy rains over the Southwest and central Rockies during the first part of the week while dry weather continued to engender wildfires in the Far West and northern and central Intermountain West. Major blazes were still burning in Idaho and northern and central California as the week ended, but cooler conditions aided firefighters in their efforts to control most of the fires. Unseasonably cool air pushed into the northern and central Intermountain West, northern and central Rockies, Great Plains, and Mississippi Valley behind a pair of strong cold fronts. At least 170 daily low temperature records were established from Idaho and Utah to the Mississippi Valley during the week, with 40 record lows reported Wednesday in the Great Basin and northern and central Rockies.

During the first part of the week, Hurricane Andrew spread across southern Florida and into the Gulf while remnants of Hurricane Lester contributed moisture to thunderstorms and showers that drenched much of the Southwest and central Rockies with heavy precipitation. Meanwhile, a powerful cold front edged southeastward across the northern and central Plains and central Rockies to the upper and middle Mississippi Valley and southern Plains. The front spread heavy rain across the southern Highlands and central Great Plains and the middle Missouri and upper Mississippi Valleys. An upper level disturbance led locally heavy rain over the Tennessee and southern Ohio Valleys and southern Appalachians while a large high pressure system provided clear skies for the Northeast and mid-Atlantic.

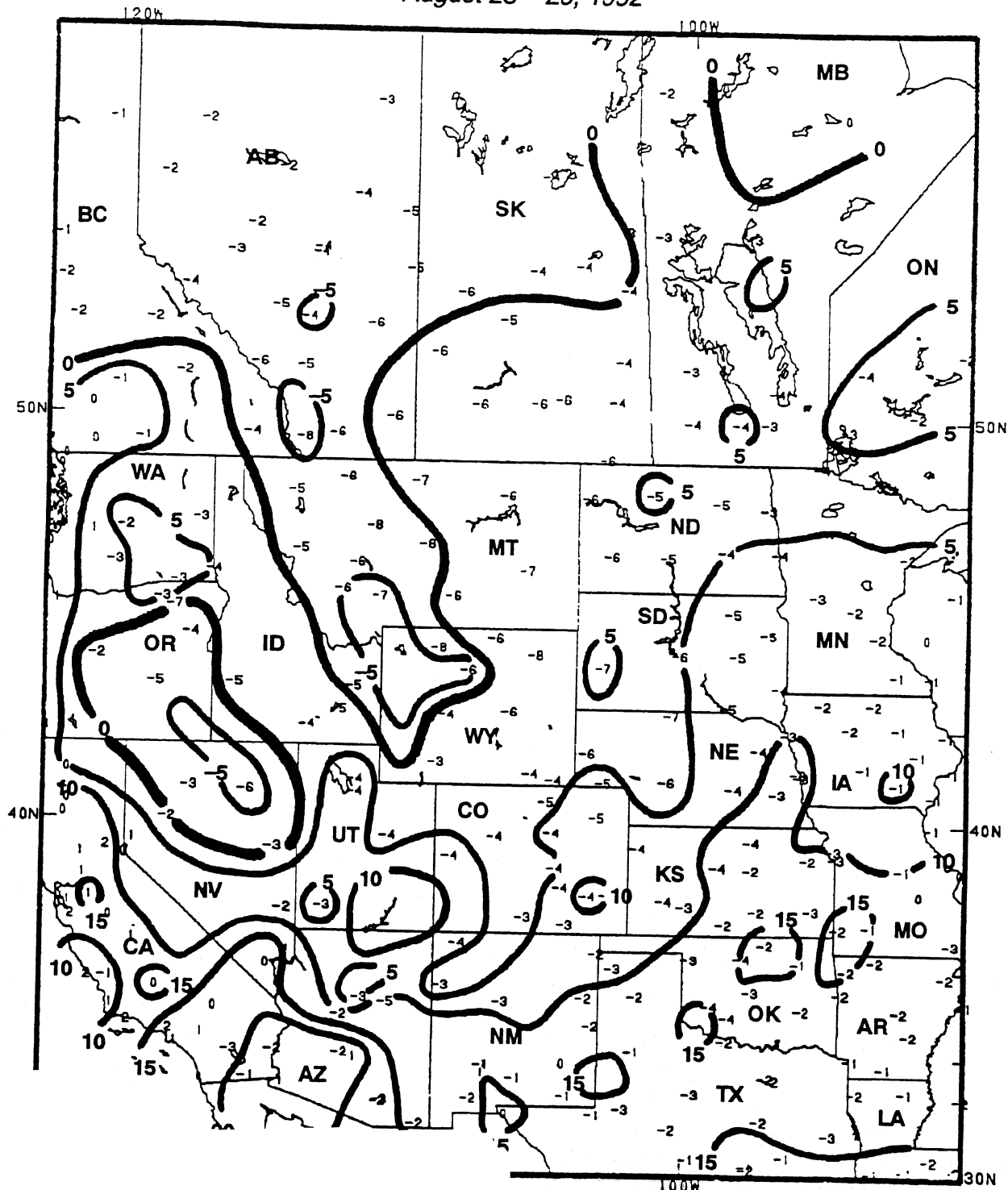
At mid-week, Andrew crashed into Louisiana, then spread severe weather with heavy rain and tornadoes from the lower Mississippi Valley to the central Appalachians as it gradually dissipated. Andrew moved northeastward into the slow, eastward-moving cold front which also brought heavy rain to the Great Lakes, Ohio Valley, and Northeast. A second cold front spread more rain and severe weather across the northern and central Plains, upper Mississippi Valley, and upper Great Lakes on Friday and Saturday. According to press reports, a tornado late Saturday night destroyed or damaged hundreds of buildings, killed two people, and injured dozens of individuals in the vicinity of Wautoma, WI.

According to the River Forecast Centers, the greatest weekly precipitation totals (from 2 to 10 inches) fell across southern Florida and from the lower Mississippi Valley to the central Appalachians and lower Great Lakes, primarily as a result of Andrew and the slow moving cold front. Amounts greater than two inches also drenched the Southwest (from the remnants of Lester), from the central Rockies to the middle Missouri Valley, from southwestern Oklahoma to northwestern Missouri, and the Ohio Valley. Scattered totals of 2 or more inches were recorded over the upper and middle Mississippi, Rio Grande, and Red River Valleys, the Great Lakes, the Northeast, southern Alaska, eastern Hawaii, and the remainder of the Southeast. Light to moderate amounts were measured in the eastern Great Basin and the remainders of the Southwest, the central and southern Rockies, Alaska, and the nation east of the Rockies. Little or no precipitation was recorded in the northern Intermountain West, northern Rockies, and

# NORTH AMERICAN HIGHLIGHTS FEATURE

PLOTTED VALUES: DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°C)  
 CONTOURS: EXTREME MINIMUM TEMPERATURE (°C)

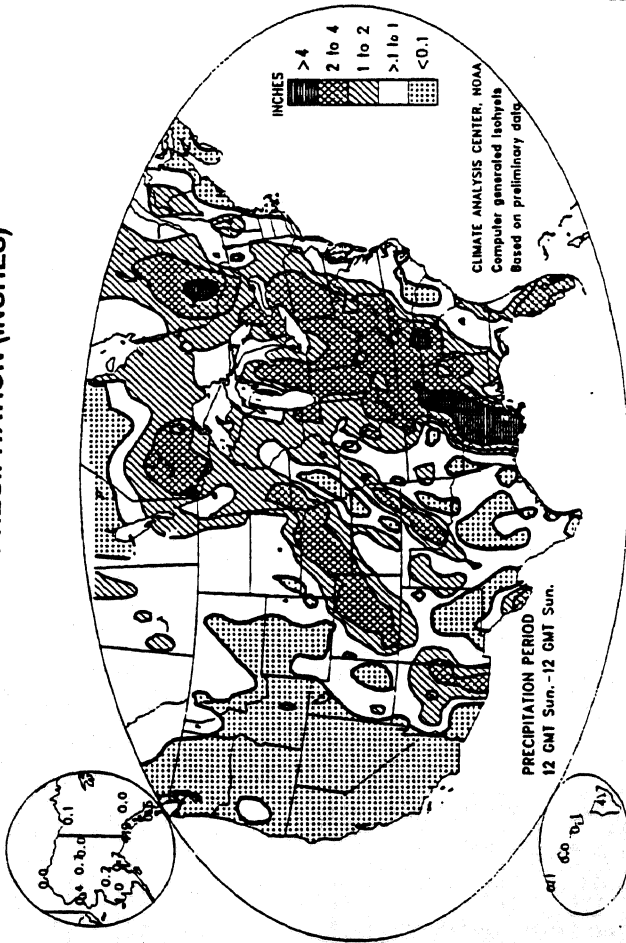
August 23 – 29, 1992



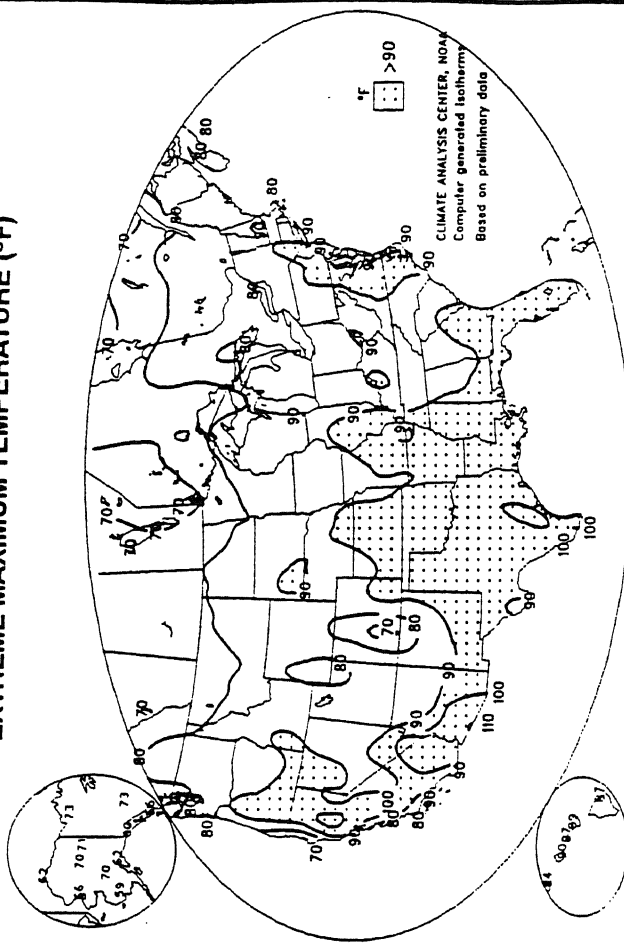
**N PRAIRIES, THE ROCKIES, AND THE INTERMOUNTAIN- through much of the Plains, Rockies, and Intermountain West**  
 rta, western Montana, and northern Wyoming. Locally heavy  
 ys after highs exceeded 30°C at some locations. Although the  
 tures helped firefighters control several large blazes that had  
 ave damaged crops across the Canadian Prairies, where crop

# UNITED STATES WEEKLY CLIMATE CONDITIONS (August 23 – 29, 1992)

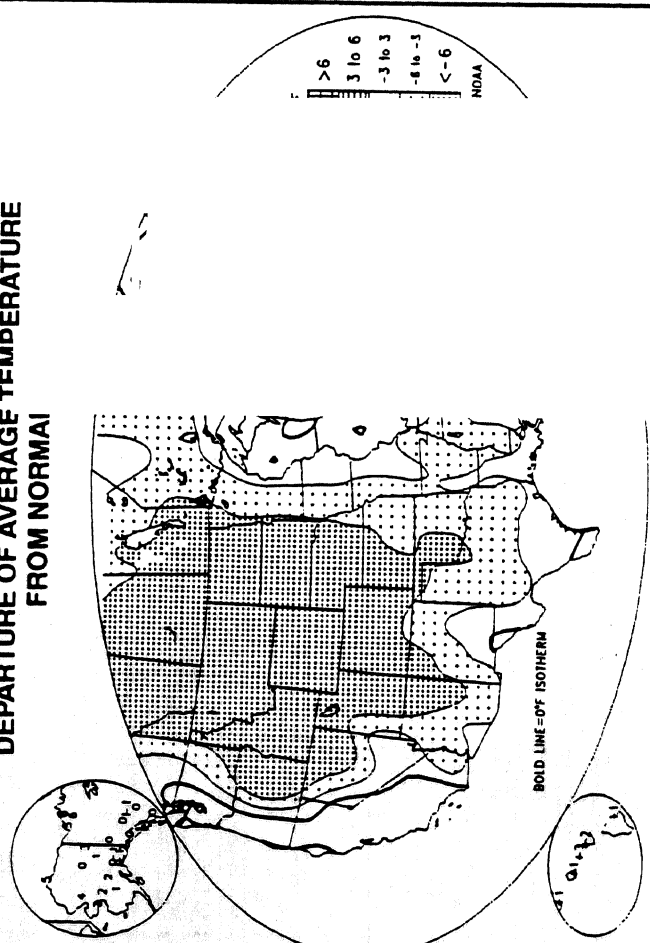
OBSERVED PRECIPITATION (INCHES)



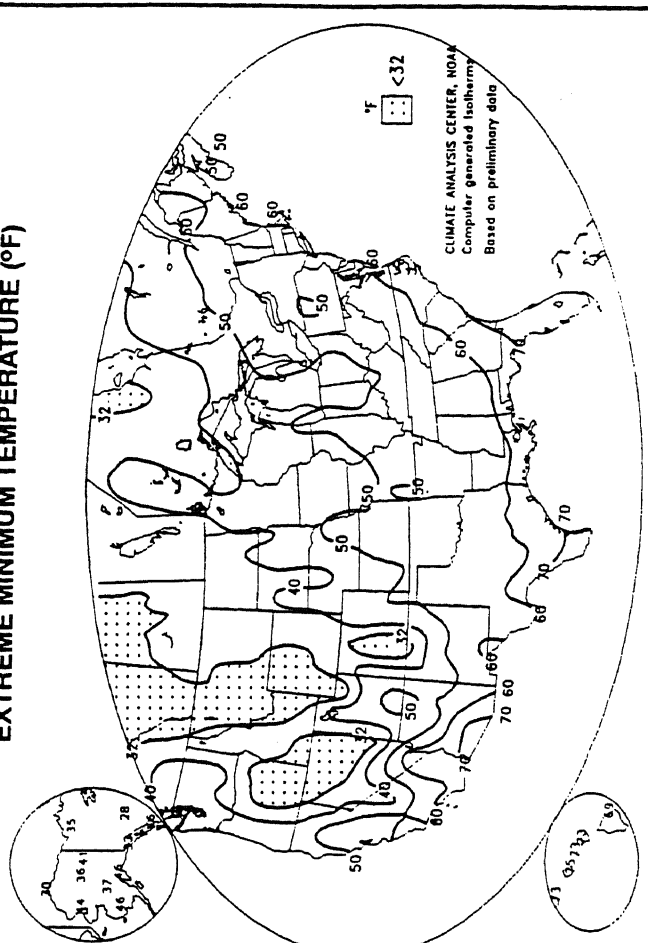
EXTREME MAXIMUM TEMPERATURE (°F)



DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL

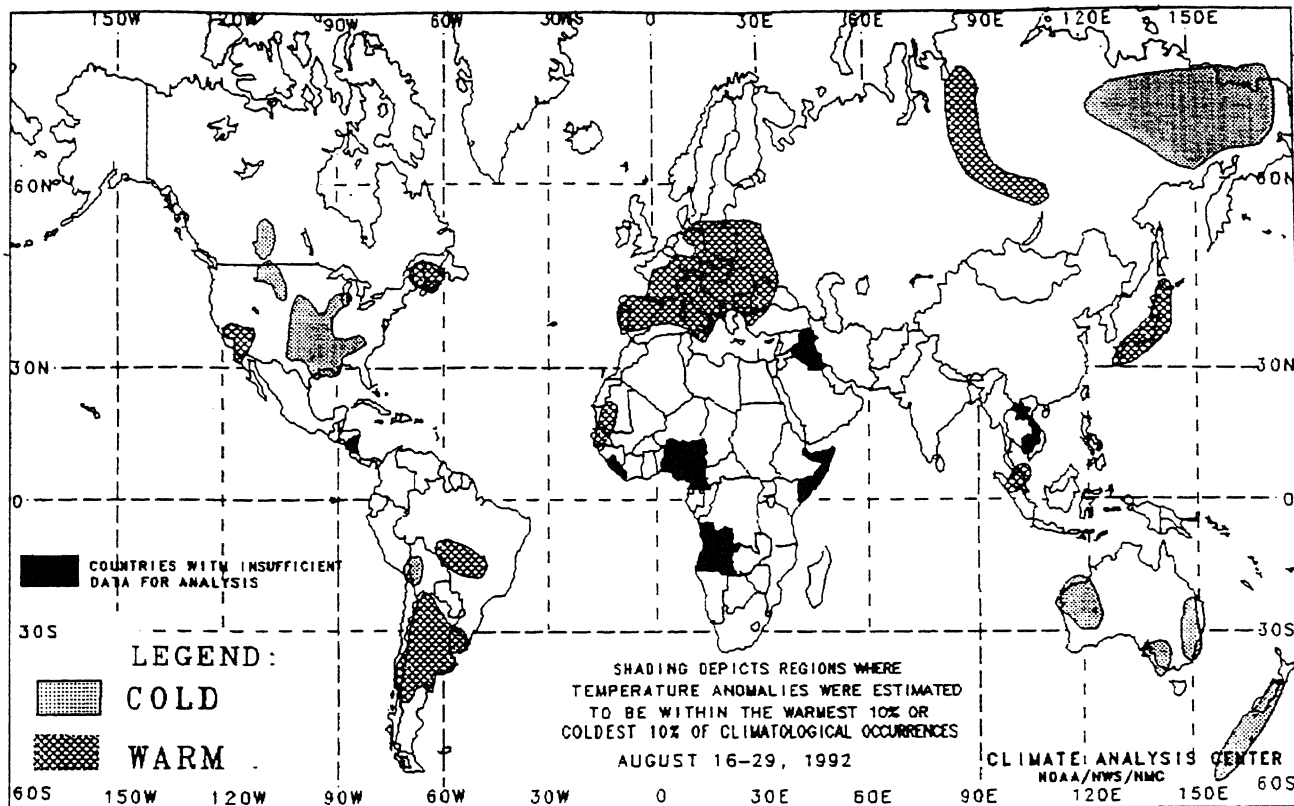


EXTREME MINIMUM TEMPERATURE (°F)



## 2-WEEK GLOBAL TEMPERATURE ANOMALIES

AUGUST 16 - 29, 1992



## 4-WEEK GLOBAL PRECIPITATION ANOMALIES

AUGUST 2 - 29, 1992

